

Men Who Have Sex with Men

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Introduction

The HIV/AIDS epidemic was first recognized among men who have sex with men (MSM). Although the overall number of cases attributed to male-to-male sex each year has decreased over time, it is the predominant reported mode of exposure in Massachusetts among people recently diagnosed with HIV infection. Male-to-male sex (including male-to-male sex/injection drug use) accounts for the largest proportion (34%) of HIV exposure among people diagnosed with HIV infection within the three-year period 2002 to 2004. Among all people living with HIV/AIDS on December 31, 2004, male-to-male sex (including male-to-male sex/injection drug use) accounts for 36% of reported exposures.

General Statistics:

- Within the three-year period 2002 to 2004, 941 of the people diagnosed with HIV infection were men who have sex with men, accounting for 34% of all reported cases and 49% of HIV infection among men in Massachusetts. Of the 941 HIV-infected MSM, 6% (N=57) also have been reported to have injected drugs.
- On December 31, 2004, there were 5,482 men living with HIV/AIDS where HIV infection was attributed to male-to-male sex, representing 36% of all people living with HIV/AIDS in Massachusetts, and 50% of men living with HIV/AIDS. Of these 5,482 men, 9% (N=479) were also known to have injected drugs.

Regional Distribution:

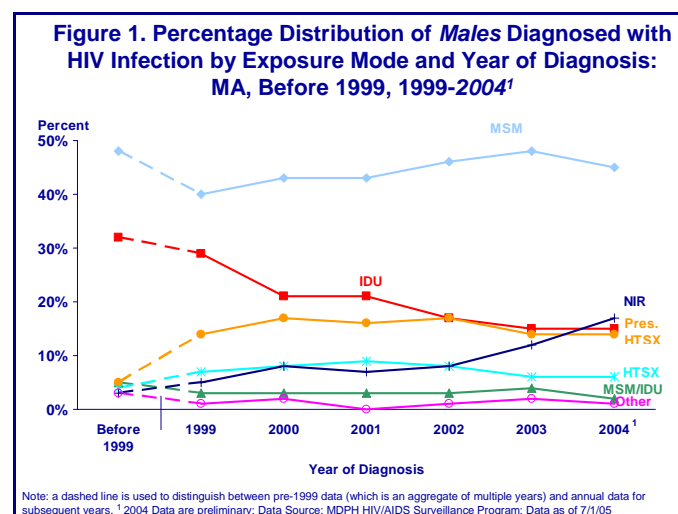
Male-to-male sex is the most frequently reported mode of exposure in the Boston, Northeast and Southeast Health Service Regions among people recently diagnosed with HIV infection. Among those living with HIV/AIDS, it is the most frequently reported mode of exposure in the Boston, Metrowest, Northeast and Southeast regions.

Among cities with over 20 people diagnosed with HIV infection within the three-year period 2002 to 2004, the following have the highest proportions of persons whose HIV infection is attributed to male-to-male sex (N=number of HIV-infected men reported to be MSM):

• Medford	69%	(N=22)
• Somerville	46%	(N=21)
• Boston	45%	(N=369)
• Revere	41%	(N=15)
• Everett	40%	(N=10)
• Cambridge	40%	(N=23)
• Malden	34%	(N=14)
• Fall River	32%	(N=14)
• Chelsea	27%	(N=10)
• Chicopee	23%	(N=5)

Diagnosis of HIV Infection over Time

The proportion of men with diagnosis of HIV infection who were reported to have engaged in male-to-male sex (not including those with a history of injection drug use) rose from 40% in 1999 to 48% in 2003 and then decreased to 45% in 2004.



Race/Ethnicity:

- The distribution of race/ethnicity of MSM diagnosed with HIV infection within the three-year period 2002 to 2004 was:
 - 70% white (non-Hispanic)
 - 12% black (non-Hispanic)
 - 15% Hispanic
 - 2% other
- Of all men recently diagnosed with HIV infection attributed to male-to-male sex, the majority (70%) is white (non-Hispanic). Among men recently diagnosed with HIV infection and exposed through other modes, the largest proportions are black (non-Hispanic) (39%), and Hispanic (32%).
- The distribution of race/ethnicity among MSM living with HIV/AIDS is similar to that for MSM recently diagnosed with HIV infection: 73% percent are white (non-Hispanic), 12% are black (non-Hispanic), 12% are Hispanic, and 2% are of other race/ethnicity.

Age at HIV Diagnosis:

- Ten percent (N=87) of MSM diagnosed with HIV infection within the three-year period 2002 to 2004 were diagnosed during adolescence (13-24 years), as compared to 5% (N=46) of men reportedly exposed by other means.
- The proportion of adolescent MSM recently diagnosed with HIV infection varies by race/ethnicity, with 18% (N=21) of black (non-Hispanic) MSM and 13% (N=19) of Hispanic MSM with HIV infection diagnosed between the ages of 13 and 24 years compared to 7% (N=44) of HIV-infected white (non-Hispanic) MSM.
- Nineteen percent of MSM recently diagnosed with HIV infection were in their 20s, 42% in their 30s, 27% in their 40s, and 11% at the age of 50 years or older.

Risk of HIV Infection:

Behavioral Risk: According to behavioral surveys, MSM in Massachusetts are engaging in behaviors that put them at risk for HIV infection.

- The proportion of respondents to the Massachusetts Behavioral Risk Factor Surveillance System (BRFSS) reporting male-to-male sex who used a condom at last intercourse increased from 34% in 2000 to 46% in 2002, decreased to 39% in 2003, and then increased to 42% in 2004 (see note below).
- Forty-two percent of respondents to the 2003 and 2004 BRFSS who reported male-to-male sex reported three or more sex partners compared to 8% of male respondents with exclusively female sex partners.
- Forty-one percent of respondents to the 2003 and 2004 BRFSS who reported male-to-male sex reported condom use at last sexual encounter compared to 27% of male respondents with exclusively female sex partners.
- Among high school-aged respondents to the 2003 Massachusetts Youth Risk Behavior Survey (YRBS) reporting male-to-male sex:
 - 30% used a condom at last intercourse compared to 62% of sexually active males with only female partners;
 - 37% reported alcohol/drug use at last intercourse compared to 32% of other sexually active males;
 - 41% reported having four or more sexual partners compared to 19% of other males;
 - 25% reported having ever been diagnosed with an STD compared to 5% of other males; and
 - 89% reported ever having sexual intercourse compared to 72% of other males.

Note: The statistics above should be interpreted with caution due to the small sample sizes (See detailed data tables for sample size by question).

Syphilis Incidence: Recent outbreaks of syphilis among MSM in Massachusetts are a potential indicator of unprotected sex and elevated risk for HIV infection.

- The number of infectious syphilis cases reported in MSM increased over four-fold during the five-year period from 2000 (N=33) to 2004 (N=146).
- The proportion of MSM among reported infectious syphilis cases increased from 23% in 2000 to 70% in 2004.
- From 2001 to 2004, the proportion of reported infectious syphilis cases among MSM who were also living with HIV infection increased from 12% to 40%.

State-Funded HIV Counseling and Testing:

- Of 45,825 HIV tests performed in 2004, 9% (N=3,972) were among men reporting sex with men, of which 2.7% were positive.

HIV Related Morbidity and Mortality among Men Who Have Sex with Men:

AIDS Diagnoses over Time

- The proportion of MSM among reported AIDS diagnoses (including those who injected drugs) declined from 36% in 1995 to 24% in 2000. From 2001 to 2004, men who have sex with men accounted for 25% to 28% of people diagnosed and reported with AIDS.

Mortality with AIDS

- From 1995 to 2004, the proportion of AIDS deaths among MSM (including those who injected drugs) decreased from 40% to 24%.

Data Sources:

HIV/AIDS Case Data: Massachusetts Department of Public Health (MDPH) HIV/AIDS Surveillance Program, Data as of July 1, 2005

Behavioral Risk Factor Surveillance Survey Data: MDPH Bureau of Health Statistics, Research and Evaluation, Behavioral Risk Factor Surveillance System

Youth Risk Behavior Survey Data: Massachusetts Department of Education, Youth Risk Behavior Survey

Syphilis Data: MDPH Division of Sexually Transmitted Disease Prevention

HIV Counseling and Testing Data: MDPH HIV/AIDS Bureau, Office of Research and Evaluation

Additional References of Interest:

Calzavara L, Burchell AN, Remis RS, Major C, Corey P, Myers T, Millson M, Wallace E. Delayed Application of Condoms Is a Risk Factor for Human Immunodeficiency Virus Infection Among Homosexual and Bisexual Men. *American Journal of Epidemiology*. 2002;157:210-217

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Centers for Disease Control and Prevention. High-Risk Sexual Behavior by HIV-Positive Men Who Have Sex with Men — 16 Sites, United States, 2000–2002. *MMWR*. 2004;53:891-894

Colfax G, Vittinghoff E, Husnik MJ, McKirnan D, Buchbinder S, Koblin B, Celum C, Chesney M, Huang Y, Mayer K, Bozeman S, Judson FN, Bryant KJ, Coates TJ; EXPLORE Study Team. Substance use and sexual risk: a participant- and episode-level analysis among a cohort of men who have sex with men. *Am J Epidemiol*. 2004 May 15;159(10):1002-12

Sample, SJ, Patterson TL, Grant I. Binge Use of Methamphetamine Among HIV-Positive Men Who Have Sex with Men: Pilot Data and HIV Prevention Implications. *AIDS Education and Prevention*. 2003;15:133-147.

For more detailed information and a description of data limitations please see “HIV/AIDS in Massachusetts: An Epidemiologic Profile,” available online at www.mass.gov/dph/aids